

## **Abstract**

A method for determining the optimal test order for diagnosing mutations that relate to a disease. The method includes receiving data, creating a database, receiving new data, applying at least one decision tree algorithm to score each possible test order, and generating a recommendation. The method may also determine the projected costs and the projected times to perform each test in the optimal test order. A computer readable medium for determining an optimal test order for diagnosing mutations that relate to a disease. A computer system for determining an optimal test order for diagnosing mutations that relate to a disease. The system includes a computing environment, an input device, an output device, and a plurality of decision tree algorithms. The system may also determine the projected costs and the projected times to perform each test in the optimal test order.